

## **Flood Prevention in Holladay Streams and Canals**

*By Clarence Kemp, City Engineer*

The City of Holladay has been blessed with an extensive network of canals and streams. In pioneer times, these waterways were vital for farming. Today they still sustain the trees and vegetation that make Holladay uniquely beautiful. These facilities also play an increasingly important drainage role. Some of our more significant waterways include Big Cottonwood Creek, Upper Canal, Jordan and Salt Lake City Canal, Spring Creek, and the Hughes Canyon drainage system.

**Big Cottonwood Creek:** Big Cottonwood Creek is classified as a county regional storm drain facility. Flood control and maintenance of the Creek are the responsibility of Salt Lake County Flood Control. The highest potential for flooding is typically associated with snow-melt runoff. County personnel pay especially close attention to key points on the Creek during the run-off season. This effort includes keeping equipment on-site at strategic points in the event of an emergency.

**Upper Canal:** In addition to its obvious irrigation function, the Upper Canal is also classified as a regional storm drainage facility. The canal was acquired by the City of Holladay 3 years ago to better manage our storm drainage responsibilities. Today, the canal is jointly managed by Holladay City and the Upper Canal Company to serve its dual purpose of irrigation and drainage. Prior to each significant rainfall event, city staff is tasked with throttling the irrigation flows and checking to insure that each grate is clean of debris. This is followed up with ongoing inspections during the rainfall event to insure that grates do not become obstructed with debris.

**Jordan and Salt Lake City Canal:** The Jordan and Salt Lake City Canal is owned and operated by Salt Lake City. It remains one of the most important water development projects ever undertaken in the valley. It allowed the City to enter into exchange contracts with irrigators along eastern Salt Lake County. These exchange contracts essentially allowed Salt Lake City to substitute lower quality, but more secure irrigation water from Utah Lake in exchange for up to 65,000 acre-feet of higher quality drinking water from the canyons. Today, the canal continues to meet its purpose in delivering exchange water during the irrigation season. The canal is as important to water users today as it was in 1882. The Jordan and Salt Lake City Canal, of course, also serves a secondary purpose of conveying storm water during rainstorm run-off events.

**Spring Creek:** Spring Creek is regulated by the City of Holladay. The creek ends at Holladay Boulevard where it is either captured in its entirety by the storm drain system or

diverted to the Holliday Irrigation Company, depending upon the season. The storm drainage function of Spring Creek is minimal.

Hughes Canyon Drainage System: The Hughes Canyon system is designated as part of the county regional storm drain system. It collects runoff from the Hughes Canyon area, where it is conveyed to Big Cottonwood Creek at 30<sup>th</sup> East.

**FLOOD PREVENTION** is a serious concern for the city and our residents, especially as we approach the snow-melt season. Holladay, Salt Lake County, and Salt Lake City staff work hard to insure that potential flooding issues are addressed. None-the-less, flooding problems can and occasionally do happen. The support and involvement of our residents can be critical in identifying and preventing flooding problems before they occur. Below are three things that you can do to help in the prevention of flooding:

**Firstly**, the city and county staffs, while diligent, are limited in number. Often our residents see potential flooding problems that might otherwise be missed. If you have question, concerns, or are experiencing flooding, we encourage you to call the appropriate entity. If you are unsure who that may be, please feel free to call the City of Holladay.

<i>City of Holladay:</i>	<i>801-272-9450</i>
	<i>801-244-6103 (after hours - Tosh Kano)</i>
<i>Salt Lake City Canals:</i>	<i>801-483-6769</i>
<i>Salt Lake County Flood Control:</i>	<i>801-562-6418</i>
	<i>385-468-6101 (after hours)</i>

**Secondly**, please do not dump debris (limbs, garbage, grass clippings, etc.) in the waterways. It is not only against the law, but it is also costly to the taxpayer. We also ask that property owners be aware of debris and stored materials accumulating along stream and canal banks. This problem recently resulted in serious flooding damage to downstream neighbors. Last year Big Cottonwood Creek overtopped its banks west of Highland Drive. The flooding was not the result of an unexpected snow-melt event or channel deficiencies. This section of the creek had, in fact, been inspected by the county a short time before the flooding occurred. This flooding event was primarily caused by materials and debris along the upstream banks being captured by the creek as the water levels rose. The result was a quickly plugged trash grate and several hundred thousand dollars of flood damage to Holladay residents.

**Thirdly**, know when a permit is needed. The City of Holladay requires a permit to encroach on or modify any creeks or canals. Encroachments could include small structures, fences, or modifications to the banks. The protected area for perennial streams such as Big

Cottonwood Creek and Spring Creek is 100 feet on each side. For canals, it is 30 feet. Also, please note that irrigators have a prescriptive right to convey irrigation water through historic ditches. Even though a ditch may run through your property, a permit (along with irrigator approval) is required prior to modifying the ditch. The purpose of this permitting process is not only to prevent potential flooding, but also to protect these valuable community resources.

We appreciate the help and involvement of our residents in the protection of our waterways and in flood prevention efforts in Holladay.

